



RSPA/VNTSC-SS-TM694-07

Enhanced Planning Review of the Philadelphia Metropolitan Area

Final Report

June 1996

prepared for:

U.S. Department of Transportation

Federal Transit Administration

Office of Planning

and

Federal Highway Administration

Office of Environment and Planning

prepared by:

U.S. Department of Transportation

Research and Special Programs Administration

Volpe National Transportation Systems Center

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**ENHANCED PLANNING REVIEW OF THE
PHILADELPHIA METROPOLITAN AREA**

June 1996

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ACKNOWLEDGMENTS

This report is the seventh in a series of Enhanced Planning Reviews (EPRs) of major metropolitan areas produced for the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA) by the Volpe National Transportation Systems Center (Volpe Center), Research and Special Programs Administration, U.S. Department of Transportation. An earlier series of nine independent planning reviews of major metropolitan areas was published by the Volpe Center for the FHWA and FTA in 1994.

William Lyons is the Volpe Center Project Manager for the EPRs. Robert Brodesky and Beth Deysher were the lead authors and analysts for this report. Other contributors included Frederick Salvucci and Tilly Chang, both from the Center for Transportation Studies, Massachusetts Institute of Technology (MIT).

Overall guidance for the EPRs, including production of this report, was provided by the Program Manager, Deborah Burns, and Sam Zimmerman, Director, both from the Office of Planning Operations, FTA; and Sheldon Edner and Barna Juhasz, Chief, both from the Metropolitan Planning Division, FHWA.

The federal review team--consisting of staff from FTA Headquarters and Region III Office; FHWA Headquarters, Regions 1 and 3, and the New Jersey and Pennsylvania Divisions; and the Volpe Center--participated in all aspects of the EPR, including reviewing drafts of this report.

A draft of the Overview Report was provided to the Delaware Valley Regional Planning Commission (DVRPC), the Pennsylvania and New Jersey Departments of Transportation (PennDOT and NJDOT), and other participating major transportation agencies in the metropolitan area for review and comment. The Final Report adds background information for the observations and recommendations in the Overview Report and is written for public distribution. The Final Report, which was not reviewed in its entirety by the local agencies, is the responsibility of the federal agencies. Participating federal review team members are listed in the Introduction and state, regional, and local staff are listed in Appendix B.

Copies of the other reports can be requested from the Volpe Center by fax at (617) 494-3260 or by E-mail at vanderwilden@volpe2.dot.gov.

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Glossary of Acronyms and Abbreviations

ADA	Americans with Disabilities Act
CAAA	Clean Air Act Amendments of 1990
CBD	Central Business District
CFR	Code of Federal Regulations
CMAQ	Congestion Mitigation and Air Quality Funds
CMS	Congestion Management System
CMSA	Philadelphia Consolidated Municipal Statistical Area
DRPA	Delaware River Port Authority
DVRPC	Delaware Valley Regional Planning Commission
EPR	Enhanced Planning Review
FHWA	Federal Highway Administration
FRA	Federal Rail Administration
FTA	Federal Transit Administration
FY	Fiscal Year
GIS	Geographic Information Systems
I&M	Enhanced Inspection and Maintenance Program
ISTEA	Intermodal Surface Transportation Efficiency Act
MCD	Minor Civil Division
MIS	Major Investment Study
MOBILE	Environmental Protection Agency's Vehicle Emissions Factor Model
MPO	Metropolitan Planning Organization
NJDEP	New Jersey Department of Environmental Protection
NJDOT	New Jersey Department of Transportation
NJ TRANSIT	New Jersey Transit Corporation
PADEP	Pennsylvania Department of Environmental Protection
PATCO	Port Authority Transit Corporation
PennDOT	Pennsylvania Department of Transportation
RAQC	Regional Air Quality Committee
RCC	Regional Citizens' Committee
RSPA	Research and Special Programs Administration, U.S. DOT
RTC	Regional Transportation Committee
SEPTA	Southeastern Pennsylvania Transportation Authority
TCM	Transportation Control Measure
TDM	Transportation Demand Management
TIP	Transportation Improvement Program
TMA	Transportation Management Association
UPWP	Unified Planning Work Program
USC	United States Code
USDOT	U.S. Department of Transportation
U.S. EPA	U.S. Environmental Protection Agency

Volpe Center John A. Volpe Transportation Systems Center, Research and Special Programs
Administration, U.S. Department of Transportation
VMT Vehicle Miles Travelled

Executive Summary

The Federal Transit Administration (FTA) and Federal Highway Administration (FHWA) have initiated a series of joint Enhanced Planning Reviews (EPRs) to assess the impact of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) on the planning processes conducted by the transportation agencies serving metropolitan areas. The EPRs are also intended to determine the effects of planning on transportation investment processes. The information collected in the EPRs is intended to be of assistance to individual metropolitan areas in their continuing efforts to improve transportation planning practice, and to federal agencies in formulating policy and identifying technical assistance needs among agencies engaged in metropolitan planning.

The EPR for the Philadelphia metropolitan area included a federal site visit from January 17 through January 19, 1995. At the conclusion of the site visit, the federal review team presented preliminary observations and recommendations to the local agencies taking part in the review. The team then formulated several additional observations as a result of the further review of documents and notes. These observations were incorporated into a draft Overview Report which was distributed for review and comment to the Metropolitan Planning Organization (MPO) and other local participants in the EPR. The Overview Report formed the basis for this Final Report, which describes the EPR in greater depth and is intended for public distribution.

The following is the summary conclusion and a complete set of the observations and recommendations presented in the Overview Report. The section where the observations and recommendations are discussed in context is noted under each topic.

The federal team identified several areas where the MPO and the participating agencies in the local transportation planning process have successfully implemented comprehensive and coordinated planning practices. In particular, these include the following areas:

- Cooperation between the states and among the local agencies with the MPO.
- Public involvement process.
- Project prioritization process.
- Linkages between transportation planning and goods movement.
- Commitment to making travel demand modeling enhancements.
- Consideration of the link between transportation and land use planning.

- Technical assistance provided to Pennsylvania and New Jersey member jurisdictions, and when requested, to local jurisdictions.

Conversely, the federal team identified specific areas of activity where continued progress should improve the transportation planning process in the Philadelphia metropolitan area. These include the following areas:

- Better integration of transit plans into the intermodal transportation plan for the region.
- Further development of a more specific long-range plan, with the identification of investments (or placeholders), particularly for improving conformity and financial analyses.
- Refinement of the financial component of the 2020 Plan, assuming it is comparable to what was completed for the 2015 Plan.
- Development of scenarios and a long-range vision for the 2020 Plan.
- Further progress in the development of the Congestion Management System.
- Development of a pedestrian plan.
- Adoption of agreements as required under the Planning Regulations.
- Fostering a better understanding of the regional transportation planning process by Minor Civil Divisions (MCDs) and the relation of their land use decisions to transportation needs.

A. Organization and Management of the Planning Process

These observations can be found in Section III of this report.

1. Inclusion of Relevant and Concerned Groups: The Board of Commissioners includes non-voting members, such as the transit operators and the Chair of the MPO's citizens committee.
2. New Committees: The MPO has created new committees and task forces in response to the ISTEA requirements that address issues such as the importance of goods movement and the link between transportation and land use.
3. Serving the Needs of Its Membership: The MPO's staff serves regional planning needs by providing technical and policy-making assistance to each of its members. This is

particularly complex at times because Pennsylvania and New Jersey often have different methods and approaches for similar tasks.

4. Representation of Local Jurisdictions: The MCDs on the Pennsylvania side of the metropolitan area, which are towns within the counties, do not have direct representation in the regional planning process. During the review, members of the federal team suggested that the Board could consider creating a task force as a mechanism to amplify their current efforts to incorporate the MCDs more directly into the regional planning process.
5. Formal Agreements: The planning process does not have formal written agreements in place defining the roles and responsibilities between the MPO, the states, and transit operators.

B. Development of the Transportation Plan, Transportation Improvement Program (TIP) and Unified Planning Work Program (UPWP)

These observations can be found in Section IV of this report.

1. Further Development of an Intermodal Plan: DIRECTION 2020 is comprehensive in approach and is a good preliminary effort at providing a regional framework and basis for long-range intermodal planning. However, although the region's three main transit providers have become more active participants in the MPO process, they indicated that they are continuing to plan independently of one another. This is not surprising, since there is little overlap between the areas that they serve. Nevertheless, better overall integration is dependent upon each of the transit agencies, considering the relationship of their services to those of other modes. At the same time, further improvement in transit integration could be achieved by the different transit operators in the places where their services overlap.

No comprehensive regional transit strategy or direction is apparent in the multimodal transportation plan. That is, the MPO's long-range planning process is not simultaneously addressing all transportation modes in preparation of a single comprehensive strategy. The MPO could consider a more substantial formal role in the planning process for transit operators. The MPO serves as a forum to bring transit and highway institutions together in the development of regional, multimodal transportation strategies. It is incumbent upon transit operators and the highway agencies to actively participate in the planning process with this in mind.

2. Achieving Greater Plan Specificity: The constrained scenario is a preliminary step at establishing a vision for the region to embrace; however, without greater specificity, the plan appears to have no road map for addressing and resolving many of the major transportation planning issues facing the region. The presumption is that the MIS process will provide the project specificity for the appropriate corridors in future plan updates.

3. Role of the TIP: The preparation of the TIP is the main focus of the MPO's regional planning process; the TIP does not yet appear to be a management tool that is being implemented for carrying out the transportation plan.
4. Project Advancement: There is a project development and advancement process, managed by the MPO, which has promoted more active participation by its member governments. The MPO has attributed this new process to the ISTEA requirements of financially constraining the TIP.

C. Financial Planning and Financial Constraint

These observations can be found in Section V.A. of this report.

1. Specificity of the Transportation Plan: The 2015 plan identifies corridors and transportation centers, not specific improvements. According to the MPO staff, the 2020 Plan will not be specific either, since corridor studies have not yet been completed. Without more specificity over the twenty-five year period, there can be no clear picture of the funding needed to maintain, operate, and improve the existing transportation system.

D. Major Investment Studies (MIS)

These observations can be found in Section V.B. of this report.

1. Modal Integration: The Goods Movement Task Force that has recently been formed is a preliminary attempt at integrating planning for different modes. The continued involvement of all modes will contribute to an MIS process that considers a wide range of options and design concepts.
2. Reexamination of "Pipeline" Projects: The MPO has identified nine TIP projects for Pennsylvania as candidates for an MIS. Since many of these projects were in the "pipeline," in terms of capital programming, design concepts had been identified prior to the passage of ISTEA. By committing these projects to MIS, the MPO is demonstrating a willingness to rethink the design and scope of each project by considering a full range of options and technologies that will most effectively satisfy travel demand.

E. Air Quality and Conformity

These observations can be found in Section V.D. of this report.

1. Strong Air Quality Modeling Capabilities: The MPO's technical capability enables it to conduct air quality and conformity analyses in a complex bi-state area, in which both states have adopted different legislative mandates and analytical approaches for meeting CAAA requirements.

2. Coordination of the Multiple MPOs and States in the Nonattainment Area: The MPO has improved coordination among the MPOs and states that are located in the ozone non-attainment area. By continuing to strengthen these relationships, a better indication could develop of how the non-attainment area is progressing, as a whole, towards meeting the National Ambient Air Quality Standards.
3. Air Quality Modeling: The MPO should continue with the travel demand and air quality model updates it has begun for the next round of conformity. These will enhance the MPO's ability to fully meet the modeling requirements contained in the Conformity Rule.
4. Conformity State Implementation Plan (SIP) Revision: The conformity SIP revisions for New Jersey, outlining the responsibilities of all agencies involved with conformity, should be completed and submitted to the U.S. EPA. The MPO is also encouraged to work with the States of Delaware and Maryland, as well as the Wilmington MPO to develop formal agreements describing how conformity determination will be handled in order to cover the entire CMSA.
5. Specificity of the Plan: Given that the 2015 Plan does not specify many more improvements than those listed in the TIP, determining conformity, based on the long-range plan, provides only a limited picture of existing and future levels of emissions. The MPO could choose specific projects in corridors, even if they are only to be used as "placeholders," in the conformity analysis for the long-range plan. This will address where the region believes transportation infrastructure improvements will be needed in the future. At this time, the MPO has not chosen to utilize this option in the plan.

F. The Public Involvement Process

Discussion of these observations can be found in Section V.E. of this report.

1. Citizen Representation: The MPO has opened the planning process to the public through the Regional Citizens' Committee (RCC), which has direct access to staff and the Board. DVRPC staff indicated that they are trying to expand membership to include individuals who represent the interests of different minority groups, neighborhoods and communities, and individuals who are physically challenged.
2. Workshops and Public Meetings for the 2020 Plan: The MPO's workshops on specific corridors for the 2020 Plan encouraged an open exchange between the public and the MPO. The MPO staff indicated that the workshops were a costly effort and was uncertain whether future workshops could be held. In the event that they are not, other mechanisms should be explored to ensure the continuation of public comment on the corridors in the 2020 Plan.

G. ISTEA Fifteen Factors

Discussion of these observations can be found in Section V.F. of this report.

1. Goods Movement Task Force: The Goods Movement Task Force is beginning to integrate goods movement into the planning process. This level of coordination, which includes public and private experts, is intended to achieve greater goods movement efficiencies in the region and move the region closer to fulfilling ISTEA requirements.
2. Integration of Bicycle Planning: The MPO is beginning to integrate its bicycle-planning efforts into the regional planning process by producing a plan for the Pennsylvania side, which will be an addition to DIRECTION 2020. Initial efforts, spurred partly by the bicycle committee, have been made to consider the inclusion of bikeways in the design and scope of some TIP highway projects.
3. Land Use: The MPO and the states recognize the importance of the relationship between land use and transportation planning and the limitations that Home Rule imposes on the effectiveness of regional planning. The MPO has created a role for itself within this constrained environment as an educator and advocate for better communication and cohesion among the jurisdictions.
4. Pedestrian Plan: No strategies have been identified for inventorying or developing a pedestrian pathway system linking, for example, transportation centers and nodes.

H. Integration of Strategic Transit Planning

Discussion of these observations can be found in Section VI of this report.

1. Suburban versus Downtown Focus: At the same time that the Southeastern Pennsylvania Transportation Authority (SEPTA) recognizes the need to move forward with new services to meet suburban demands, it also faces the capital expense burdens presented by a deteriorating infrastructure located primarily in the urban core. Due to the high cost of rehabilitating its infrastructure and its lack of a dedicated local funding source, SEPTA could have limited financial resources over the short and long term to commit to suburban solutions.
2. Integration of Transit Planning: The MPO's regional concept for land use and transportation development that it prepared for the 2020 Plan could provide a common base for the planning that is being conducted by each of the transit providers, and could further integrate the transit providers into the long-range planning process. Also, as the region begins to undertake major investment studies, the federal team fully expects that the collaborative process that is in place and that includes all modal actors, will continue.

I. Travel Demand Forecasting

Discussion of these observations can be found in Section VII of this report.

1. Model Improvements: The MPO has initiated work on all of the recommendations included in the consultant's report.
2. Modeling Transit Access: The incorporation of more sophisticated ways of modeling transit mode of access is being pursued in concert with development of a nested mode choice model.
3. Nested Mode Choice Model Estimation: The nested mode choice work that is planned is divided into two parts, with an auto nest and a transit nest. The work for both modes is being done concurrently and given a high priority.
4. Validation: A detailed validation plan, consistent with FTA and FHWA guidance, is being undertaken. This guidance is contained in FTA's publication, "Procedures and Technical Methods for Transit Project Planning," and in FHWA's courses on travel demand forecasting. This guidance emphasizes validation at a level of detail appropriate to determine whether each model can adequately replicate demand (e.g., trip generation, distribution, mode split, or assignment).
5. Surveys: DVRPC has collected a home-interview survey in 1987-88 and a cordon line origin-destination survey in 1988-89. These surveys are being used in conjunction with the 1990 Census CTPP data to develop, calibrate, and validate the transportation model enhancements.
6. Geographic Information Systems (GIS): The MPO is encouraged to continue developing its GIS-T capability so that it can better gauge the impact of land use and transportation changes. This capability could be particularly useful when developing MIS or providing local support to counties and townships.

I. Introduction

The Intermodal Surface Transportation Efficiency Act (ISTEA) significantly changed the law governing metropolitan transportation planning. In response to the changes introduced by ISTEA, the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) issued revised planning regulations on October 28, 1993, setting new requirements for the transportation planning processes. The requirements are presented in 23 CFR Part 450 and 49 CFR Part 613, Statewide and Metropolitan Planning Final Rule. The Clean Air Act Amendments of 1990 (CAAA) also imposed rigorous new transportation planning requirements in metropolitan areas, particularly those that are designated nonattainment or maintenance areas for air quality.

In support of the implementation of the revised regulations, FHWA and FTA jointly established a schedule of Enhanced Planning Reviews (EPRs). The EPRs are intended to determine the impact of planning on transportation investment processes. The EPRs also provide a technical assessment of the transportation planning and programming processes, including consideration of the six focal points identified by the FHWA and FTA Administrators for certification. The six focal points are: Financial Constraint and Financial Planning, Major Investment Studies, Congestion Management Systems, the Planning Process and Links to the Conformity Requirements of the Clean Air Act Amendments of 1990, the Public Involvement Process, and the ISTEA Fifteen Planning Factors. Of equal importance, EPRs will provide a forum for dialogue and the exchange of information on perspectives and concerns related to ISTEA between FTA and FHWA headquarters and field staff, and state and local officials responsible for metropolitan area transportation planning.

Additionally, EPRs will provide information for future long-term federal policy-making, including possible legislative and regulatory changes; identify national issues and trends; and document national case studies of best professional practice. This information will also be used to help identify how future federal technical assistance programs can best assist Metropolitan Planning Organizations (MPOs) and other planning agencies in carrying out the requirements of ISTEA. Finally, EPRs are intended to support progress toward meeting ISTEA requirements.

The EPR has four parts: a review of planning documents, a site visit to the area, a summary draft Overview Report, and the issuance of this Final Report. At the conclusion of the site visit, the federal agency participants in the EPR presented preliminary observations and recommendations to the local agencies taking part in the review. The team then formulated several additional observations as a result of the further review of documents and notes. These observations were incorporated into a draft Overview Report distributed to MPO and other local participants in the EPR for review and comment. The Overview Report formed the basis for this Final Report, which describes the EPR in greater depth and is intended for public distribution.

A federal review team consisting of FHWA and FTA headquarters and regional staff, FHWA division staff, U.S. EPA regional staff, and U.S. DOT/Volpe Center staff conducted the site visit on January 17 through January 19. The federal team consisted of:

Federal Transit Administration

Sean Libberton, Office of Planning
John Garrity, Region III
Tony Tarone, Region III
Herman Shipman, Region III

Federal Railroad Administration

Joel Palley, Office of Policy

U.S. DOT/Volpe Center

Robert Brodesky, Project Staff
Beth Deysher, Project Staff
Fred Salvucci, Massachusetts Institute
of Technology

Federal Highway Administration

Barna Juhasz, Office of Environment and
Planning
Fred Orloski, Region 1
Steve Rapley, Region 3
Mario Jorquera, Region 3
Sandra Balmir, Pennsylvania Division
Bob Hall, Pennsylvania Division
Lloyd J. Jacobs, New Jersey Division

U.S. Environmental Protection Agency

Larry Budney, Region III

William Lyons is the Volpe Center project manager for the EPRs. Research assistance was provided by Frederick Salvucci and Tilly Chang, both from the Center for Transportation Studies, MIT.

Local participants in the site visit included staff from the following agencies: DVRPC, which is the MPO serving the Philadelphia metropolitan area; the New Jersey and Pennsylvania Departments of Transportation (PennDOT and NJDOT); Southeastern Pennsylvania Transportation Authority (SEPTA); New Jersey Transit Corporation (NJTRANSIT); Delaware River Port Authority (DRPA); Port Authority Transit Corporation (PATCO); the Pennsylvania Department of Environmental Protection (PADEP); and the New Jersey Department of Environmental Protection (NJDEP). The review team also met with local officials and representatives of DVRPC.

A list of MPO members, local participants in the EPR site visit, and the agenda for the site visit are provided in Appendices A, B, and C of this report. A list of the documents reviewed as part of the EPR is provided in Appendix D.

This report presents the results of an EPR conducted jointly by FHWA and FTA in the Philadelphia metropolitan area. The report summarizes and assesses the planning and programming processes that were in place at the time of the planning review in January, 1995, and considers future trends. The review team acknowledges that the planning review was conducted barely a year after the federal planning regulations for ISTEA had been issued. Up to the time of the planning review, the MPO had begun to make significant strides towards meeting the regulations. In this short time period, it had adopted a 2015 transportation plan, a

financially constrained TIP, and had begun work on a more comprehensive 2020 transportation plan. The federal team further acknowledges that the planning process that is managed by the MPO has continued to evolve since the planning review was conducted. Since the planning review, the MPO has completed two key documents that partly comprise the 2020 transportation plan; one is a summary document of the physical infrastructure, and the other is a summary of people and goods movement. The latter includes the financial constraint element. These two documents were not available during the site visit and are not reflected in this report.

II. Philadelphia Metropolitan Area

A. Population and Employment Trends

Although the Philadelphia metropolitan area has had modest growth during the last fifteen years, the growth has been characterized by increasing suburbanization coupled by a loss of residents and jobs in Philadelphia, Trenton, and Camden. The region's population grew 12.4 percent from 1960 to 1990, reaching 5.2 million people. Employment increased by 28 percent from 1970 to 1990, reaching over 2.8 million jobs. Regional forecasts predict that these current patterns of growth will continue, with increases in the fringe of the suburban areas and continuing declines in the cities. DVRPC expects the population to grow 7 percent by 2005 and 11 percent by 2020. Employment growth from 1990 to 2005 is expected to increase around 13 percent, reaching 3.0 million jobs.

Employment and population growth rates are substantially larger on the New Jersey side of the bi-state area. New Jersey's population and employment growth rates for the fifteen-year period from 1990 to 2005 are 12 percent and 16.8 percent, respectively, while Pennsylvania's are 4.5 percent and 11.7 percent.

B. Regional Transportation System - Moving People and Goods

Both the highway and transit infrastructure are extensive, but also, according to the MPO staff, old and in constant need of reconstruction. The regional highway system consists of 8000 miles of roadway that carries 92.5 million vehicle miles travelled (VMT) per day and 92 percent of all trips in the region. VMT and auto trips increased dramatically in the 1980's throughout the region at a time when little new highway construction occurred. As a result, the region is experiencing congestion beyond typical peak hours on its freeways and arterials. Congestion is also occurring in suburban areas and is a problem in many of the older suburban town centers.

The public transit system is composed of 246 miles of commuter rail lines, 51 miles of rapid rail transit lines, and over 200 trolley and bus routes. Between 1980 and 1990, SEPTA's ridership declined by about 4 percent. This has been attributed to the economic slowdown of the late 1980's and a shift in the location of jobs from the Central Business District (CBD) to the suburbs. A protracted strike in 1983 and massive construction projects, which interrupted service to the northern suburbs during periods of 1992 and 1993, have also diverted transit ridership. NJ TRANSIT ridership has stabilized after steep declines following fare increases in the 1980's.

Rail freight is served by several terminals in the region which are able to handle piggyback and container traffic. In addition, intermodal terminals recently opened at I-76 and I-95, and near the Packer Marine Terminal. Philadelphia International Airport ranks fifteenth in air cargo tonnage and the region's port activities are operated by three separate authorities: 1) the

Philadelphia Regional Port Authority; 2) the South Jersey Port Corporation and; 3) the Delaware River Port Authority (DRPA), which oversees all major river crossings. The Port of Philadelphia is served by three railroads, and the region has numerous rail-truck intermodal yards.

III. Organization and Management of the Planning Process

DVRPC's Board of Commissioners is the designated MPO for the bi-state region. The MPO was created in 1965 as a result of Pennsylvania and New Jersey legislation. It has eighteen voting members, representing the states of Pennsylvania and New Jersey, eight counties (located on both sides of the Delaware River), and the cities of Philadelphia, Camden, Chester, and Trenton (see Figure 1). There are also thirteen non-voting members, representing SEPTA, NJ TRANSIT, and PATCO; federal highway and transit agencies; state and local planning agencies; environmental and housing agencies, and the public. A complete list of the member organizations is included in Appendix A.

Representatives of DVRPC's Board stated that the committee structure provides an effective forum for the Board members to communicate regularly and to address transportation policies and projects on a regional level. The Board of Commissioners of DVRPC is supported by the following principal committees:

- Regional Transportation Committee (RTC), which advises the Board on transportation planning issues;
- Regional Air Quality Committee (RAQC), which provides a forum for addressing air quality and related transportation issues; and
- Regional Citizens' Committee (RCC), which provides an opportunity for citizens to address transportation issues.

To better respond to ISTEA concerns, additional committees and task forces have been added in the last few years to address bicycle mobility and goods movement and to improve integration of local land use planning.

The MPO staff members have strong technical capabilities that enable them to support the transportation planning process in a complex institutional environment. They provide technical assistance to member jurisdictions and organizations some of whom have their own planning capabilities and varying methods of accomplishing the same tasks. For example, the staff provides technical assistance to the Pennsylvania and New Jersey DOTs, each of which may possess different legislative mandates and methodologies for activities ranging from allocating transportation funds to designing congestion management systems and preparing MOBILE model parameters. Sometimes the products of individual organizations remain separate; other times they are woven together by the MPO staff into one product.

Although major transportation providers and organizations are represented on the Board, some Board members stated that their jurisdiction or organization could be better represented. Philadelphia, which contains 30 percent of the population of the region, has only one vote. Also, SEPTA, which serves Philadelphia and its Pennsylvania suburbs and is the region's largest transit

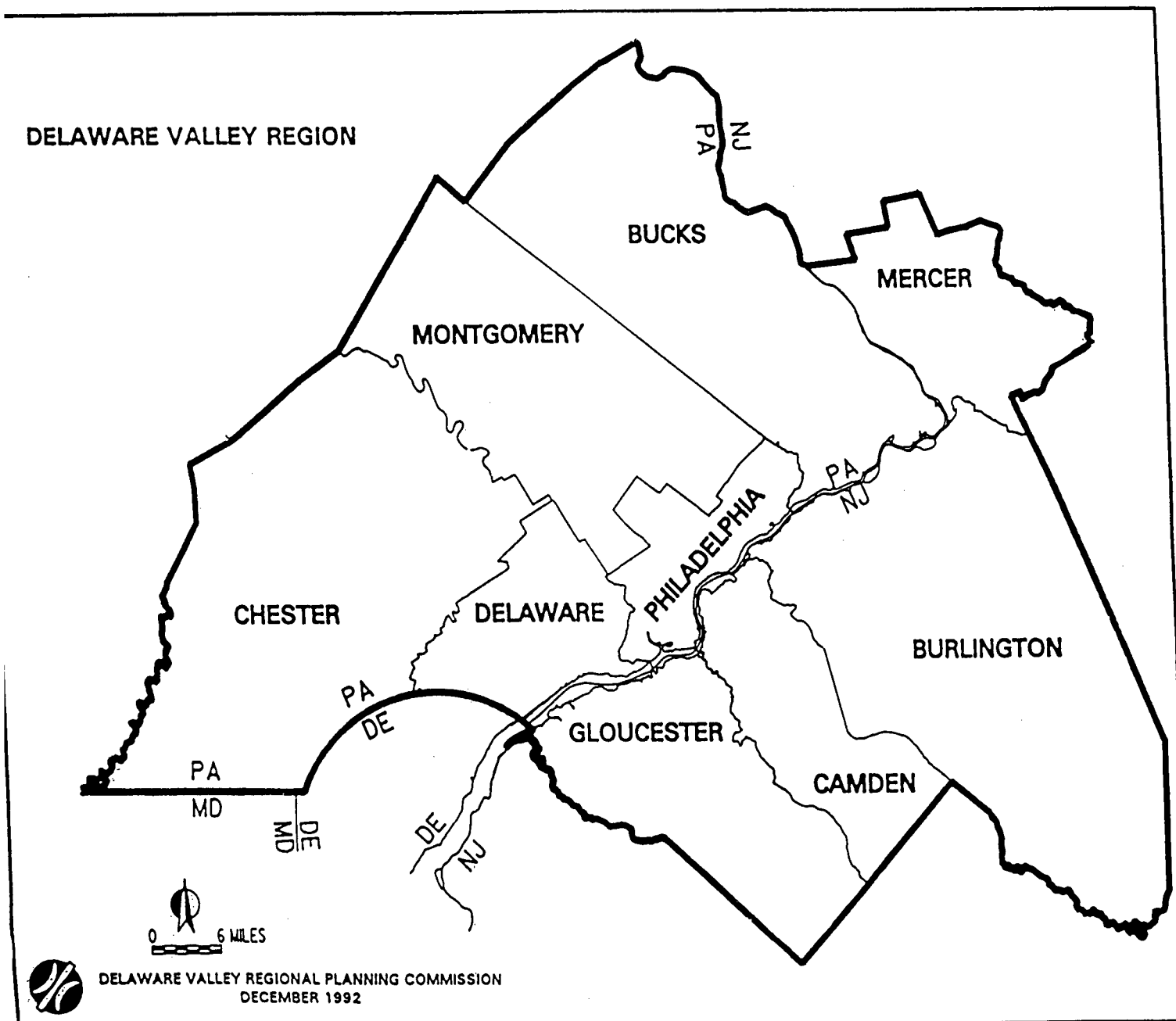


Figure 1. Map of the Philadelphia Metropolitan Area

operator, has sought voting status. Since the MPO's inception, no changes in membership have been made to its Board. According to DVRPC's Executive Director, altering the Board's membership would be a complicated and difficult process and would undermine the delicate balance that has been achieved. Any changes would require revising the enabling legislation passed by Pennsylvania and New Jersey.

Another representation issue involves the 352 local townships and boroughs located in Pennsylvania and New Jersey. They are called Minor Civil Divisions (MCDs) in Pennsylvania and municipalities in New Jersey. They do not have direct membership in the MPO; instead, they are represented in the regional planning process by their respective counties. From an organizational standpoint, since the number of MCDs in the region are numerous, this appears to be a logical and efficient structure. However, for the planning process to work effectively, particularly at the regional level, each of the counties must maintain very good lines of communication with these communities and coordinate their county-wide plans with the local land use, land development, and transportation planning activities. No policies or guidelines exist to ensure that this occurs on a consistent and regular basis.

During the planning review, representatives of the Board of Commissioners and the MPO's staff stated that local jurisdictions are frequently the source of many of the projects that eventually reach the MPO through the TIP development process. Representatives from Pennsylvania and New Jersey stressed that local jurisdictions are identifying needs, conceptualizing projects, and conducting land use planning independent of the regional planning process. Board members further indicated that, while they represent their local jurisdictions and transportation organizations, the planning requirements in ISTEA impel them to plan in the context of a regional view more than in the past.

The DVRPC's Executive Director identified developing stronger transportation and land use links as a major issue facing the region, particularly in Pennsylvania, where each town is granted land use controls through state legislation. At the same time, he stated that the possibility of developing these links would be very difficult, given that a large number of jurisdictions have these controls and state legislation would have to be changed. Even in this environment, the MPO's staff is currently considering ways to more regularly involve local jurisdictions and educate them in the regional planning process. The MPO's adopted centers and corridors approach (which was developed in conjunction with the MPO's long-range transportation planning process) is intended to introduce regional land use considerations into local decision making. Some of the region's local jurisdictions have formed transportation management associations in an effort to secure representation at the MPO level. To date, there are four associations on the Pennsylvania side and three on the New Jersey side of the MPO region.

The MPO maintains institutional relationships with state transportation and air quality organizations and with transportation providers. Formal written agreements defining organizational responsibilities for air quality planning and for TIP development are in the process of being completed.

Observations and Recommendations

1. Inclusion of Relevant and Concerned Groups: The Board of Commissioners includes non-voting members, such as the transit operators and the Chair of the MPO's citizens committee.
2. New Committees: The MPO has created new committees and task forces in response to the ISTEA requirements that address issues such as the importance of goods movement and the link between transportation and land use.
3. Serving the Needs of Its Membership: The MPO's staff serves regional planning needs by providing technical and policy-making assistance to each of its members. This is particularly complex at times because Pennsylvania and New Jersey often have different methods and approaches for similar tasks.
4. Representation of Local Jurisdictions: The MCDs on the Pennsylvania side of the metropolitan area, which are towns within the counties, do not have direct representation in the regional planning process. During the review, members of the federal team suggested that the Board could consider creating a task force as a mechanism to amplify their current efforts to incorporate the MCDs more directly into the regional planning process.
5. Formal Agreements: The planning process does not have formal written agreements in place defining the roles and responsibilities between the MPO, the states, and transit operators.

IV. Development of the Transportation Plan, Transportation Improvement Program (TIP), and Unified Planning Work Program (UPWP)

A. Regional Transportation Plan

The Year 2015 Transportation Plan, completed in September of 1993, is the current plan and the first long-range plan prepared since passage of ISTEA and the CAAA. A new long-range plan for the year 2020, scheduled for completion in the spring of 1995, has since been adopted. A key element in the 2020 Plan is the integration of land use with transportation. The 2020 Plan is part of a more comprehensive effort, known as DIRECTION 2020, which is the MPO's first effort at integrating all modes into the regional planning process. It includes bicycle and pedestrian mobility elements, urban goods movement, and airports.

For DIRECTION 2020, DVRPC staff prepared more than thirty reports which provide a foundation for policy-making and public participation. Many of the reports define regional transportation goals, objectives, policies, and action steps. Of the DIRECTION 2020 reports, four make up the 2020 Plan: 1) a policy agenda; 2) a summary document of the physical infrastructure; 3) a summary of people and goods movement; and 4) a technical report of forty-four identified centers and corridors. Only two of the reports--the policy agenda and the one documenting the corridor and center alternatives--were complete at the time of the review.

In preparing the centers and corridors document, the MPO developed two scenarios. The first projected current growth trends with the majority of the new development in the region occurring in the suburban fringes. The MPO has embraced the second scenario in which physical growth is constrained and cluster development occurs along forty-four corridors in proximity to existing highway and transit lines.

The MPO Board and staff have concluded that implementing the constrained physical growth scenario would enable the region to meet ISTEA and CAAA requirements of managing VMT growth and improving air quality; however, the scenario assumes implementation and adherence to the recommendations at the MCD level. Currently, legal means to strengthen regionwide planning, specifically the coordination of land use controls, do not exist. Therefore, without changing local land use controls, the unconstrained growth scenario may have a greater chance of occurring given historical trends.

Although the constrained scenario establishes a vision for the region to embrace, it remains somewhat general at this point. That is, the planning approach does not consider alternatives that identify the design concept and scope of projects that need to be undertaken in each of the corridors to meet anticipated travel demand needs, along with anticipated levels of funding. The MPO intends that the major investment study (MIS) process and corridor level planning activities will further define plan features and be reflected in triennial updates of the plan.

The lack of project specificity raises a number of issues. First, determining whether or not the long-range planning effort is financially constrained is difficult. Secondly, the MPO does not appear to have a road map for addressing and resolving many of the major transportation issues that it has identified as important or urgent, such as an aging, decaying infrastructure, increased travel and congestion in the suburbs, and center city revitalization. Finally, the air quality conformity analysis can only provide the region with an incomplete "picture" of the emission impacts that would result from different transportation decisions.

Although the region's transit systems are significant in terms of their coverage and patronage, the plan does not present a regional transit strategy with complete integration into the multimodal planning process. In many respects, the MPO's regional concept for land use and transportation development (as defined by the constrained physical growth scenario) provides a broad base for taking this next step and developing an intermodal plan. Similarly, a study, which was commissioned by SEPTA's Board several years ago and has emerged as the authority's long-range plan, provides another jumping-off place for developing an integrated, intermodal regional plan. The document was a significant resource to the MPO project teams during the preparation of the centers and corridors report. Its recommendations were embraced to varying degrees throughout the Pennsylvania portion of the region.

During the planning review, the transit operators indicated that they plan independently, and no direct links existed between their long-range planning activities and the MPO's efforts. Further refinement of a transit vision will require closer coordination among the different organizations within the regional planning process.

B. Transportation Improvement Program (TIP)

Discussions during the planning review indicated that short-term programming, that is, the preparation of the TIP, is the main focus of the metropolitan transportation planning process. The MPO has adopted procedures for identifying and prioritizing all project submissions for the TIP. It is through this process that local jurisdictions and transportation providers decide which projects to fund. With the assistance of MPO staff, the counties and the region's transportation operators score their individual project's ability to meet the following regional goals:

- Preserve and Modernize Key Elements of the Existing System.
- Improve Safety and Security.
- Mitigate Congestion.
- Protect and Improve the Environment.
- Support Economic Activity.
- Improve Mobility of People and Goods.
- Support Land Use Plans and Goals.

Prior to scoring the projects, the goals are weighted using qualitative input obtained from the Board, the RTC, the RCC, and a survey of public interest groups. Toward the end of the ranking

process, subcommittee members have an opportunity to review and, if they choose to, challenge the scores. The final rankings are then sent to the full RTC.

The TIP development process also calls for the preparation of a financial component, after the projects are scored, which establishes the limits of the region's financial capacity over the short term. It includes estimates of funding levels for the TIP, which have been discussed with state and federal agencies. At the end of the process, the RTC submits its recommended TIP to the MPO Board for adoption. It is also at this point that the MPO Board considers the possibility of flexing, or transferring, funds between FHWA categories. During the last round, the MPO's Board recommended that PennDOT flex \$100 million of highway funds to SEPTA in FY 1995.

The TIP contains few new construction projects. Almost 80 percent of the TIP's funds are committed to maintaining existing transit and highway networks. However, according to DVRPC staff, the TIP's project mix has begun to change since ISTEA and now includes a number of bike paths and intermodal type projects.

In support of the TIP process, DVRPC staff track projects, maintain data, and assist members in project development and applications. The MPO has recently strengthened its monitoring role to help locally initiated projects proceed into the project development stages and compete more effectively for funding. To assist in this effort, DVRPC has developed a flow chart, which it refers to as the invisible pipeline, which illustrates the stages of a project's life. This monitoring effort helps to prevent locally initiated projects from being passed by during the development or preliminary engineering phases within the state DOTs and regional transit agencies. It is also a means of ensuring that the region has an adequate number of projects which are construction ready when competing for flexible funds or extra resources.

According to members of the MPO's Board, the requirements for financial constraint and procedures for prioritizing projects have caused member governments, such as Camden and Philadelphia, and other organizations, such as SEPTA, to participate in the TIP development process to a greater degree than ever before. Without a high level of participation, member governments were concerned that their projects would not be advanced, and that their jurisdictions or agencies would not receive their fair share of federal dollars.

Just as they are not directly represented at the MPO level, local jurisdictions are not directly involved in the identification or advancement of projects that would be considered for inclusion in the TIP. According to the documents provided, municipal planners and engineers generate project lists that are reviewed at the county level; however, the region has no policies to ensure the participation of the jurisdictions with their respective counties is consistent and cooperative. Although there are procedures for the county's involvement in the regional planning process, no formal roles exist for local jurisdictions at the MPO level.

C. Unified Planning Work Program (UPWP)

The UPWP is a bi-state three-year work program which is prepared annually and includes regionally significant highway and transit planning activities to be conducted by member governments. The current program costs \$8.8 million. The Work Program committee develops the UPWP based on the planning needs of DVRPC and its members and the planning requirements of ISTEA and the CAAA.

The program has three major sections. The first identifies projects that will be undertaken by DVRPC. They cover a range of topics, from improving air quality to ensuring inter-governmental coordination and improving the efficiency of the region's transportation system. The second identifies activities to be conducted by member governments to support or advance highway and transit planning (in their specific counties). Typically, the intent of these planning activities is to improve mobility or the efficiency of the "local" transportation network. The third includes high priority planning activities or projects which could not be funded from existing resources. The UPWP states that new funding sources, both public and private, must be sought to implement these activities.

Observations and Recommendations

1. Further Development of an Intermodal Plan: DIRECTION 2020 is comprehensive in approach and is a good preliminary effort at providing a regional framework and basis for long-range intermodal planning. However, although the region's three main transit providers have become more active participants in the MPO process, they indicated that they are continuing to plan independently of one another. This is not surprising, since there is little overlap between the areas that they serve. Nevertheless, better overall integration is dependent upon each of the transit agencies considering the relationship of their services to those of other modes. At the same time, further improvement in transit integration could be achieved by the different transit operators in the places where their services overlap.

No comprehensive regional transit strategy or direction is apparent in the multimodal transportation plan. That is, the MPO's long-range planning process is not simultaneously addressing all transportation modes in preparation of a single comprehensive strategy. The MPO could consider a more substantial formal role in the planning process for transit operators. The MPO serves as a forum to bring transit and highway institutions together in the development of regional, multimodal transportation strategies. It is incumbent upon transit operators and the highway agencies to actively participate in the planning process with this in mind.

2. Achieving Greater Plan Specificity: The constrained scenario is a preliminary step at establishing a vision for the region to embrace; however, without greater specificity, the plan appears to have no road map for addressing and resolving many of the major transportation

planning issues facing the region. The presumption is that the MIS process will provide the project specificity for the appropriate corridors in future plan updates.

3. Role of the TIP: The preparation of the TIP is the main focus of the MPO's regional planning process; the TIP does not yet appear to be a management tool that is being implemented for carrying out the transportation plan.
4. Project Advancement: There is a project development and advancement process, managed by the MPO, which has promoted more active participation by its member governments. The MPO has attributed this new process to the ISTEA requirements of financially constraining the TIP.

V. FHWA and FTA Administrators' Focal Points

A. Financial Planning and Financial Constraint

Financial Planning

The MPO staff stated that it works closely with PennDOT and NJDOT to determine the levels of state funding that will be made available. This process is complicated by the fact that the states have varying approaches to governance.

New Jersey issues guidance to allocate funds to the state's three MPOs. DVRPC is currently evaluating whether New Jersey's most recent allocation to the region represents its fair share. The state covers the entire local match for federally funded projects. Procedurally, the TIP is presented to New Jersey's state legislature before approval by DVRPC. Finally, NJDOT makes funding decisions for Congestion Mitigation and Air Quality (CMAQ) projects in consultation with a statewide air quality committee.

In contrast to New Jersey, Pennsylvania's counties and cities experience less uniformity in the allocation of funds. Each jurisdiction petitions the State for funds. In addition, counties, cities, and transit operators are responsible for providing their own match to federal funds. They can negotiate with the State to provide a percentage of the match, but this occurs on a project-by-project basis. Decision makers in the Philadelphia area feel that, historically, the Philadelphia metropolitan area has not received a fair share of state funding relative to its economic contribution to the state. DVRPC was recently successful in campaigning for a higher portion of Pennsylvania's State highway funds for the TIP years, increasing the original allocation from 19 percent of the state total to 29 percent. According to DVRPC staff, the latter percentage more closely approximates the region's share of population and its economic contribution to the State.

Both states rely on traditional funding sources. The New Jersey Transportation Trust Fund provides state funds for highway and transit projects that are funded by the Motor Fuel Tax, Toll Authority Contract Payments, and other vehicle fees and taxes. The obligation limit on the Trust Fund was recently raised by the legislature to \$565 million per year. General appropriations are also made annually to provide operating assistance to transit. New Jersey utilizes a provision in ISTEA which allows the state to take certain credits for toll revenues invested in the system by its toll authorities, thereby offsetting the required 20 percent match for federal projects.

Act 26, the Public Transportation Assistance Fund for transit in Pennsylvania, was passed in 1991 to provide a dedicated funding source for that State. It taxes tires, motor vehicle leases and rentals, and utility companies, and generates approximately \$141 million per year. SEPTA receives approximately 70% of these funds and is allowed to spend up to 30% of the funds for asset maintenance (operating costs). The Pennsylvania Motor License Fund provides for highway and bridge improvements, design, maintenance and purchase of rights-of-way, as

well as highway patrol operations. This fund generates approximately \$1.5 billion annually. Discretionary appropriations are also made annually by the State to provide operating assistance to transit. Other sources of funds include bridge, turnpike, and other toll authorities whose revenues are used to maintain and operate their respective facilities.

Future innovative revenue sources, which are not currently utilized but are identified in the 2015 Plan are: congestion pricing, parking pricing, toll districts, and the development of unused rights-of-way.

Financial Constraint

The 2020 Plan was scheduled for completion in the spring of 1995. The financial component was not complete at the time of the review; however, the MPO staff indicated that it would be comparable to the one included in the current 2015 Plan.

The 2015 Plan identified corridors and transportation centers and very few specific improvements beyond those programmed in the TIP. Due to this approach, the plan's financial component identifies how only \$5.0 billion of \$18.5 billion of anticipated revenue would be spent. The remaining \$13.4 billion was shown as projected revenue with little indication of how it would be used, except that future projects would be developed through corridor and subarea studies, management systems, and the planning processes of the states, authorities, and counties.

The preparation of a financially constrained plan requires moving beyond the time frame of the TIP and identifying improvements that are consistent with the long-range vision. However, the design concept and scope for improvements to be built with the uncommitted \$13.4 billion have not yet been determined. Until these difficult tasks are completed through the regional planning process, the steps that the region must take to meet its accepted vision for transportation and land use development will not be clear.

The MPO has not documented specific alternatives that identify the design concept and scope of different improvements versus the levels of future funding on a corridor-by-corridor basis. The MPO staff stated that the transportation plan would become more specific after the completion of corridor and MISs. Thus, until the necessary MISs have been completed, the MPO has no clear picture of the financial needs for transportation for its 2020 Plan.

The TIP is financially constrained; however, it does not provide a clear financial picture regarding the sources of funds that are needed to cover the \$3.5 billion in costs. The TIP identifies the aggregate level of federal funds--\$3.0 billion--which the area expects to receive. It does not identify the source of the remaining \$0.5 billion. The assumption is made that these funds will be provided, as they always have been, by the states, local transit operators, and local jurisdictions.

Observations and Recommendations

1. Specificity of the Transportation Plan: The 2015 plan identifies corridors and transportation centers, not specific improvements. According to the MPO staff, the 2020 Plan will not be specific either, since corridor studies have not yet been completed. Without more specificity over the twenty-five year period, there can be no clear picture of the funding needed to maintain, operate, and improve the existing transportation system.

B. Major Investment Studies

At the time of the site visit, the MPO had no written or adopted procedures for selecting and conducting MISs, although discussion and negotiations were under way with each State DOT. Similarly, New Jersey had not issued state guidance or identified MIS candidates. Pennsylvania had issued state guidance to the MPO on identifying MISs. The MPO had prepared a list of nine projects for Pennsylvania from the current TIP, which would be candidates for an MIS. Although these projects have been included in the TIP, the intent is to re-examine the project concepts during the MIS prior to proceeding with final commitments.

Many of the region's major projects, including the nine identified for MISs, have been in the pipeline for a long time and pre-date the MIS requirement. State and regional participants asserted that the projects were reviewed and no further work was necessary to meet MIS requirements. The participants expected that the region would use the MIS primarily for assessing new proposals, which would eventually lead to the refinement of the transportation plan.

The region has not proceeded with any significant MIS, except for the Burlington/Gloucester Corridor Assessment, which evaluated the potential for new transit services on existing railroad and highway rights-of-way in the New Jersey suburbs. This was led by NJ TRANSIT with assistance from the MPO's staff. All transit alternatives were to be evaluated using mobility, environmental, economic, operating, and community acceptance criteria.

Observations and Recommendations

1. Modal Integration: The Goods Movement Task Force that has recently been formed is a preliminary attempt at integrating planning for different modes. The continued involvement of all modes will contribute to an MIS process that considers a wide range of options and design concepts.
2. Reexamination of "Pipeline" Projects: The MPO has identified nine TIP projects for Pennsylvania as candidates for an MIS. Since many of these projects were in the "pipeline," in terms of capital programming, design concepts had been identified prior to the passage of ISTEA. By committing these projects to MIS, the MPO is demonstrating a

willingness to rethink the design and scope of each project by considering a full range of options and technologies that will most effectively satisfy travel demand.

C. Congestion Management System (CMS)

As a Transportation Management Area (TMA), defined as an urban area with a population greater than 200,000, and as an ozone and carbon monoxide nonattainment area, the Philadelphia metropolitan region is required to develop a Congestion Management System (CMS). At the time of the review, development of the CMS was in the beginning stages.

Each of the states has chosen to work with the MPO in different ways for developing the CMS. PennDOT has given the MPO the lead role for defining its CMS network and performance measures. Once completed, PennDOT will integrate the network, as identified by the MPO, into the statewide network. On the other hand, NJDOT is playing the lead role in developing its statewide CMS so that it will be able to integrate it with other management systems in the state. It will also choose its own performance measures. The MPO will attempt to coordinate the efforts of the two states through the CMS advisory committee, which includes PennDOT, NJDOT, SEPTA, NJ TRANSIT, the counties, and public interest groups.

According to SEPTA staff, the future role of transit in the CMS is not clear. In addition, SEPTA is concerned that the evaluation of transit strategies will not reflect all of the true costs of auto and transit. SEPTA staff said that this concern stemmed from practices of decision makers who traditionally examine transit operating costs but do not consider the full range of highway operating costs, such as insurance, opportunity costs of buying land, lost real estate tax revenue, and accident related issues.

D. Air Quality Planning and Conformity

Like transportation planning, the MPO conducts air quality planning in a complex institutional environment. The non-attainment area is designated as severe for ozone and a portion of the area is classified as moderate for carbon monoxide.

The non-attainment area covers four states and contains all or part of four MPOs (Figure 2). Each of these MPOs conducts separate conformity determinations. The Philadelphia metropolitan area covers the largest geographic area and has the only MPO with in-house staff capable of completing the technical steps to determine conformity of the Plan and TIP. The other MPOs--which serve counties in Delaware (including the City of Wilmington) and southern New Jersey and one in Maryland--have limited staff and rely on their respective state DOTs to conduct the analyses to determine air quality conformity.

The MPOs share data to ensure consistency of traffic counts across areas; however there is little overall coordination of their transportation and air quality planning. Although there are no formalized agreements among the states and MPOs defining the roles and methods for

conducting conformity analyses and for sharing data, DVRPC has attempted to achieve a certain level of coordination with the states of Delaware and Maryland. Representatives from the Departments of Transportation of Delaware and Maryland are members of the MPO's air quality technical advisory committee meetings. Continuing to strengthen these relationships could further promote the non-attainment area's progress, as a whole, towards meeting the National Ambient Air Quality Standards.

Regional air quality planning for the greater Philadelphia area, as managed by the MPO, is guided by the RAQC and the RTC, in coordination with NJDOT, PennDOT, the New Jersey Department of Environmental Protection (NJDEP), and the Pennsylvania Department of Environmental Protection (PADEP). The RAQC includes participants from Maryland and Delaware, the U.S. EPA, FTA, FHWA, SEPTA, and local governments. The MPO's task is made more difficult by the fact that it covers two states, which have adopted different emission control policies and programs. For example, the MPO prepares separate sets of MOBILE parameters and estimates separate emission factor tables for each state.

Each state makes use of the MPO technical staff differently in its effort to meet clean air standards. For example, the MPO led the effort, funded by Pennsylvania, to analyze the trip making and emissions effects that could result from implementing different transportation control measures (TCMs). In New Jersey, similar research was conducted with the MPO technical staff as an active committee member.

The Pennsylvania state legislature opted to implement a different enhanced inspection and maintenance (I&M) program. When it is implemented, the reductions may be less than originally planned, however, the MPO has started considering alternatives in case this occurs.

At the time of the review, the conformity state implementation plan (SIP) revision, outlining responsibilities of all agencies involved with completing conformity analyses, had been completed for Pennsylvania; however, the U.S. EPA had not approved it. New Jersey had not yet completed its conformity SIP revision.

The MPO's UPWP includes improvements to its travel demand and air quality modeling process, which will improve its ability to evaluate the impact of TCMs, different modes of transportation, land use changes, and different policy directions. These improvements will also enhance the ability of the modeling process to meet the conformity rule's requirements for serious or higher ozone nonattainment areas.

Observations and Recommendations

1. **Strong Air Quality Modeling Capabilities:** The MPO's technical capability enables it to conduct air quality and conformity analyses in a complex bi-state area, in which both states

Lower Delaware Valley Ozone Non-Attainment Area

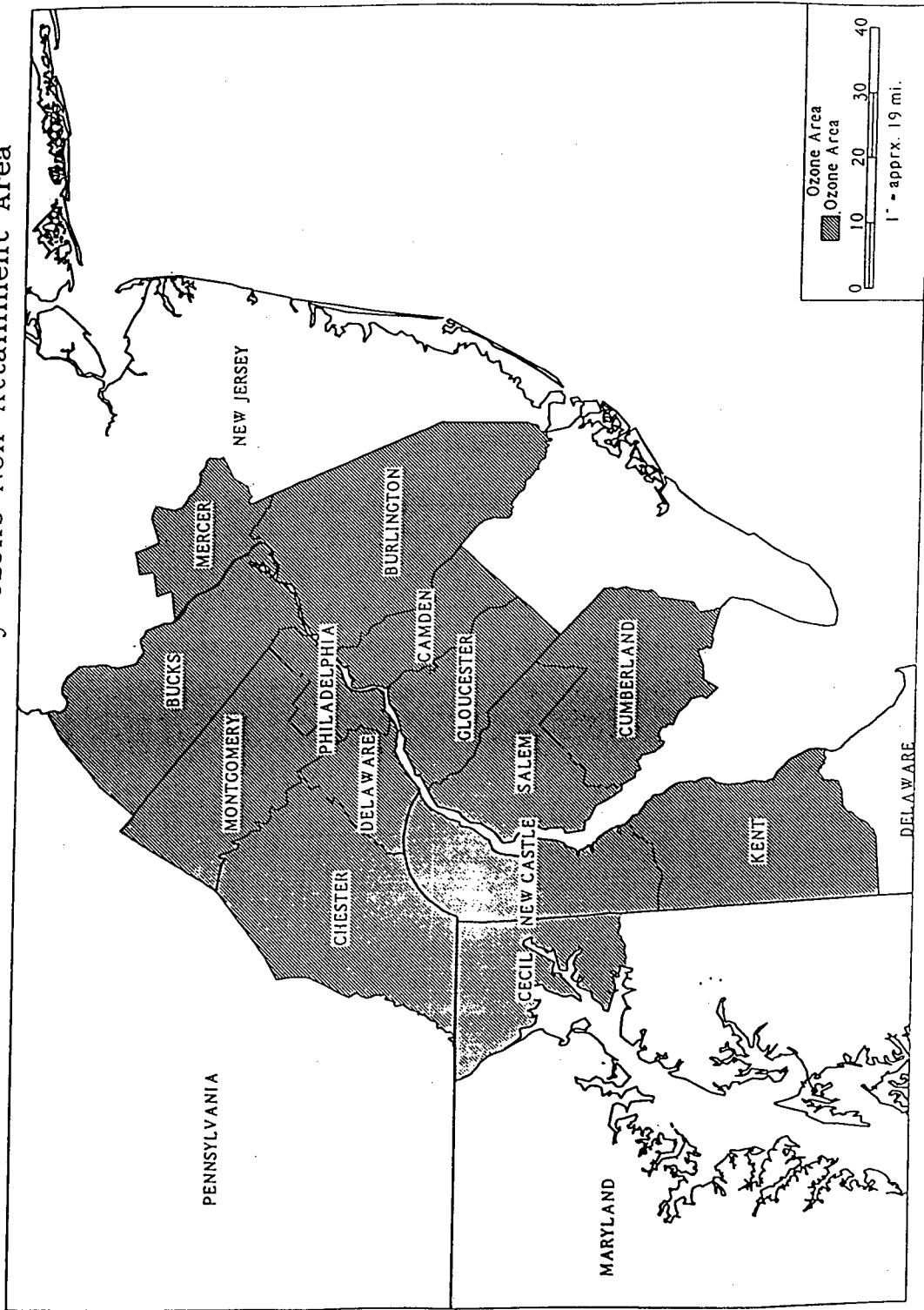


Figure 2. Lower Delaware Valley Ozone Nonattainment Area

have adopted different legislative mandates and analytical approaches for meeting CAAA requirements.

2. Coordination of the Multiple MPOs and States in the Nonattainment Area: The MPO has improved coordination among the MPOs and states that are located in the ozone non-attainment area. By continuing to strengthen these relationships, a better indication could develop of how the non-attainment area is progressing, as a whole, towards meeting the National Ambient Air Quality Standards.
3. Air Quality Modeling: The MPO should continue with the travel demand and air quality model updates it has begun for the next round of conformity. These will enhance the MPO's ability to fully meet the modeling requirements contained in the Conformity Rule.
4. Conformity SIP Revision: The conformity SIP revisions for New Jersey, outlining the responsibilities of all agencies involved with conformity, should be completed and submitted to the U.S. EPA. The MPO is also encouraged to work with the States of Delaware and Maryland, as well as the Wilmington MPO to develop formal agreements describing how conformity determination will be handled in order to cover the entire CMSA.
5. Specificity of the Plan: Given that the 2015 Plan does not specify many more improvements than those listed in the TIP, determining conformity, based on the long-range plan, provides only a limited picture of existing and future levels of emissions. The MPO could choose specific projects in corridors, even if they are only to be used as "placeholders," in the conformity analysis for the long-range plan. This will address where the region believes transportation infrastructure improvements will be needed in the future. At this time, the MPO has not chosen to utilize this option in the plan.

E. Public Involvement Process

The federal regulations for implementing ISTEA require a "proactive public involvement process that provides complete information, timely public notice, full public access to key decisions, and supports early and continuing involvement of the public." The MPO adopted a policy statement in April, 1994, to comply with these ISTEA requirements.

The MPO has developed an impressive community involvement program that is managed by its Public Affairs Office. The effort is guided by a mission statement which emphasizes providing information in a timely fashion, broadening the constituency, and providing ample opportunity for public comment. The Public Affairs Office also coordinates the Public Participation Steering Committee, which advises the MPO on how to reach constituencies, develop public opinion polls, and plan county workshops.

The Public Affairs Office has employed many mechanisms, ranging from marketing surveys to public meetings that include dinner, to meet its objectives of bringing the public into the process. During the last year, the MPO invited advocacy groups and individuals to attend five public workshops to discuss two of the proposed corridors of the 2020 Plan. The workshops attracted over 650 people. This large attendance was unprecedented for meetings that were not focused on specific projects. Other information-gathering activities were conducted to support the development of the long-range plan, including a telephone survey and a general opinion survey that ran in six regional newspapers.

The cornerstone of the MPO's community involvement effort is the RCC, whose responsibilities include reviewing and commenting on plans and policies and making recommendations for consideration by the Board. The RCC has created subcommittees to review documents such as the 2020 Plan and the TIP. Its involvement in policy making is further enhanced by participation of its chairman as a non-voting member of the Board.

The RCC has about eighty members, including representatives from the private sector, social service entities, environmental activists, and other groups. Monthly meetings can attract close to 80 percent of the membership and last nearly a day. During the planning review, DVRPC staff acknowledged the need to expand participation and membership of different minority groups, neighborhoods, and communities on the RCC.

Observations and Recommendations

1. Citizen Representation: The MPO has opened the planning process to the public through the RCC, which has direct access to staff and the Board. DVRPC staff indicated that they are trying to expand membership to include individuals who represent the interests of minority groups, neighborhoods and communities, and individuals who are physically challenged.
2. Workshops and Public Meetings for the 2020 Plan: The MPO's workshops on specific corridors for the 2020 Plan encouraged an open exchange between the public and the MPO. The MPO staff indicated that the workshops were a costly effort and was uncertain whether future workshops could be held. In the event that they are not, other mechanisms should be explored to ensure the continuation of public comment on the corridors in the 2020 Plan.

F. ISTEA Fifteen Factors

Many of the fifteen factors have been implicitly understood and have been incorporated into the region's planning and decision-making activities even before ISTEA. Since the passage of ISTEA, the MPO has initiated efforts to directly address some of the factors. This is evident in the goals that have been adopted to guide the development of the transportation plan, the TIP project prioritization criteria, and the planning projects that have been included in the UPWP. The MPO

has also initiated additional programs and created new committees that support the implementation of several of the fifteen factors, some of which are discussed below.

Development of a Comprehensive Goods Movement Strategy

Over the last few years, goods movement has been identified as a regional issue. Two years ago, DVRPC created the Goods Movement Task Force as a means to bring together public and private sector goods movement experts. The task force, which is co-chaired by the Deputy Secretary of PennDOT and the Executive Director of DVRPC, is charged with identifying structures that impede the efficient movement of goods and proposing possible solutions.

The task force began by conducting a survey of facilities located in the region, collecting available information. The task force has used the information to identify intermodal nodes, and is now looking at which facilities and structures support or feed these various locations.

With support from DVRPC staff, the task force has been able to integrate a number of its ideas into highway and transit projects during the preparation of the TIP. However, the implementation of some of the task force's ideas is difficult since it requires private individuals or companies to commit to improving their property. Part of the difficulty stems from whether or not public monies can be committed to making these improvements. Even if the funds were readily available, many of the owners are reluctant to accept public funds because of possible requirements or stipulations that could be attached (such as making exclusive rights-of-way available to others). Not unlike other businesses, these private operators are reluctant to invest their own funds in high cost projects with no guaranteed returns.

Initiation of Bicycle Planning

Within the region, bicycling and walking to work are difficult due to the age and design of the region's existing infrastructure and the density of population along many of its older corridors. The region currently has 1900 miles of bikeways; however, they are recreational in nature (i.e., not suited for work or shopping type trips) and are located mostly in state and local parks. Regional planners estimate the bicycle mode share for commuting to work to be about 1 percent.

DVRPC has begun to promote the use of bicycles. It prepared a public brochure that includes reasons to bike, safety tips, and information about products that make biking easier. DVRPC has also begun to work with regional employers who have expressed interest in sponsoring bicycle commuting programs. This consists of providing information from a nationwide inventory of employers which describes employers' initiation of biking programs and includes tips on how to make biking a more appealing commuting option.

DVRPC also established a bicycle/pedestrian steering committee to serve the communities on the Pennsylvania side of the bi-state region. Its members--which currently include DVRPC

staff, the Pennsylvania counties, bicycle advocates, the general public, environmental groups, and PennDOT--meet every three months. The committee began by collecting information on frequency, trip purpose, trip distances, and attitudes toward bicycling. The information was then used to identify regional bicycling issues.

The committee is currently working to develop a concept for a regional bicycle network on the Pennsylvania side. It has decided that the network should be designed to interconnect with existing transportation facilities, provide connectivity between jurisdictions, and facilitate long distance and commuting type trips. The committee is proceeding to rank travel routes identified by planners from each of the counties. They have concluded that their highest priority should be paths located along state, county, or local roads. TIP projects are also being reviewed by the committee to ensure that the proposed paths are rational from a network perspective and compatible with other programmed projects. In recent months, the MPO's staff has begun working with a consultant, under contract to the State of New Jersey, who has been hired to develop a statewide bicycle plan.

The MPO believes that pedestrian planning is more appropriately addressed in detail at the local level and is currently doing so in local Greenway plans, the "Reinvesting in Cities" plan, and other local center and corridor plans.

Integration of Land Use and Transportation

The MPO's staff identified the integration of land use and transportation planning as a major issue facing the region. The possibility of achieving cohesive land use planning as a means to encourage more efficient transportation activity will be particularly difficult to achieve in Pennsylvania since the Commonwealth of Pennsylvania delegates land use authority to MCDs through Home Rule. Even so, the MPO has recently established a policy committee to address the issue and explore means for achieving greater regional land use coordination. In addition, the MPO has written a policy report on land use and transportation. This report recommends specific policies to address the links between land use and transportation, coupled with suggested actions for each policy. The MPO stated that it has distributed all significant draft 2020 reports and a survey mailer on key issues and priorities for the region to each of the 352 municipalities.

Observations and Recommendations

1. Goods Movement Task Force: The Goods Movement Task Force is beginning to integrate goods movement into the planning process. This level of coordination, which includes public and private experts, is intended to achieve greater goods movement efficiencies in the region and move the region closer to fulfilling ISTEA requirements.
2. Integration of Bicycle Planning: The MPO is beginning to integrate its bicycle-planning efforts into the regional planning process by producing a plan for the Pennsylvania side, which will be an addition to DIRECTION 2020. Initial efforts, spurred partly by the

bicycle committee, have been made to consider the inclusion of bikeways in the design and scope of some TIP highway projects.

3. Land Use: The MPO and the states recognize the importance of the relationship between land use and transportation planning and the limitations that Home Rule imposes on the effectiveness of regional planning. The MPO has created a role for itself within this constrained environment as an educator and advocate for better communication and cohesion among the jurisdictions.
4. Pedestrian Plan: No strategies have been identified for inventorying or developing a pedestrian pathway system linking, for example, transportation centers and nodes.

VI. Integration of Strategic Transportation Planning

Three transit operators--SEPTA, NJ TRANSIT, and PATCO--serve the Philadelphia metropolitan region. SEPTA, the largest of the three in terms of funding and physical infrastructure, operates both bus and rail service in the Pennsylvania counties, including the City of Philadelphia. One of SEPTA's lines extends to Trenton, and another to Wilmington. NJ TRANSIT Corporation, which is a state agency, provides bus service to the New Jersey counties, the City of Philadelphia, and various shore destinations. NJ TRANSIT also provides commuter rail services between Philadelphia and Atlantic City, as well as between Trenton and Northern New Jersey. The third operator, PATCO, provides additional rail service, known as the Lindenwold High Speed Line, between Center City Philadelphia and Camden County.

The three transit operators are non-voting members of the Board and are voting members of DVRPC's committees. PATCO is a subsidiary of the Delaware River Port Authority (DRPA), which is also a member of the RTC.

The transit providers have traditionally relied on the MPO staff for demographic and travel demand forecasting and for technical assistance. More recently, according to the MPO and SEPTA staff, the passage of ISTEA has caused these two agencies to work together on a wider range of planning issues and products such as the corridor and center concept for the 2020 Plan. They now meet regularly on the TIP, and SEPTA staff participate in transportation enhancement and CMAQ project identification activities. Coordination in specific planning areas is also improving between SEPTA and PennDOT. SEPTA's one-year and twelve-year capital budgets, which provide input into the MPO's TIP, now coincide with PennDOT's Twelve-Year Transportation Program.

During the planning review, SEPTA and the other transit providers indicated that they continue to plan independently and that there is little overall coordination at the regional level (see discussion in Section IV, on the development of an intermodal plan). For example, SEPTA's Board developed a vision for regional transit development in Pennsylvania which stresses expanded suburban services. This document, known as "A Vision for the Future," was completed prior to the development of the 2015 Plan. Originally, the document was intended to be a public information tool, but has more recently been accepted by the organization as its long-range plan.

A. SEPTA

SEPTA serves an area of over two thousand square miles with buses, light rail, trackless trolley, elevated subway, and regional rail. This amounts to a total of over 1,300 bus route miles (one-way) and over 600 track miles for the remaining modes. SEPTA's twelve-year capital program costs \$4.5 billion, while its annual operating costs are \$670 million.

The staff indicated that its transit development vision, documented in "A Vision for the Future," recognizes that the distribution of people in the region has changed, suburban-to-suburban commuting has increased, and the political clout of the counties and MCDs has grown. The document concluded that SEPTA must concentrate on its traditional markets (by rehabilitating its decaying infrastructure) as well as move forward with new services to meet the needs of the emerging markets in the suburbs. Over the short term, the plan commits to the expansion of flexible feeder routes serving suburban communities, while over the long term, it advocates the examination and possible construction of a cross county commuter rail line to serve the market segment traveling from suburb to suburb.

SEPTA anticipates that a major portion of its capital budget will continue to be dedicated to reconstructing or rehabilitating sizable sections of its system, including rail transit, railroad, bus, and multi-modal projects. For example, a heavy rail reconstruction project is currently under way at the eastern end of the elevated Frankford Line, which is 5.2 miles in length. The project is scheduled for completion in 2001 at an estimated cost of \$765 million. The Frankford Line is the most heavily traveled transit line in the region, carrying up to 150,000 passengers on weekdays. The line, which was completed in 1922, began showing structural deterioration in the 1950's. SEPTA took over management of the project in 1982, and reconstruction began in 1986.

As part of its ongoing planning, SEPTA has been addressing Americans with Disabilities Act (ADA) requirements. Although preliminary efforts were at a small scale and did not require sizable financial commitments, staff project that the demand for specialized transit services and the need to redesign and reconstruct existing infrastructure will grow dramatically and strain capital resources. Concerns also exist over increasing operating costs attributable to increased service requirements, since the \$11.5 million estimated to be needed for 1995 is approaching half of the \$24 million in federal operating subsidy.

B. NJ TRANSIT

NJ TRANSIT provides local and intrastate bus services in South Jersey. Over the past few years, ridership on NJ TRANSIT bus lines between South Jersey and Philadelphia has increased by 5-7 percent. This ridership is attributed by NJ TRANSIT to the adoption of a dual fare structure for the state. Justification for the adoption of the dual fare structure came from a study which was completed with assistance from DVRPC.

NJ TRANSIT is attempting to respond to changing employment and demographic patterns and has used CMAQ funds to implement the Wheels Program, which uses small, friendly-looking vehicles to drive on tight suburban roads. Routes are not fixed, but can change to serve subscribers. Some routes are growing, while others are not. In addition, NJ TRANSIT has computerized systems to track ridership and fare collection at the fare zone and route levels and to help monitor services by time of day. It is considering re-establishing transit corridors on existing rights-of-way in Burlington and Gloucester counties.

The NJ TRANSIT Annual and 5-Year Capital Program is currently being developed and will be used to provide input into the regional TIP. Other planning efforts include the development of an annual business plan and an examination of summertime bus travel between Philadelphia, the New Jersey suburbs, and shore locations in Cape May, Atlantic, and Ocean counties.

C. PATCO

The Lindenwold High Speed Line, financed, built and owned by DRPA and operated by its subsidiary PATCO, commenced service in 1969. It cost \$94 million to build and was paid for with DRPA bridge tolls. Subsequent improvements to the system have been financed by DRPA, the State of New Jersey, and the federal government.

The commuter rail line extends for 14.2 miles between Lindenwold, New Jersey, and Center City, Philadelphia, and is operated 24-hours a day, 7 days per week.

During the planning review, PATCO's Executive Director stated that its ability to develop park-and-ride facilities adjacent to the Lindenwold Line on the New Jersey side was a major contributor to attracting passengers. PATCO operates an intermodal terminal in downtown Camden, which has a garage with 400 parking spaces and connections to local, regional, and interregional bus lines. In addition, NJ TRANSIT operates nine local bus routes in Camden County, which connect the High Speed Line with the county's major activity centers (e.g., town centers, regional malls and shopping centers, colleges, hospitals, and employment locations).

Another noteworthy attribute is PATCO's modest fares. The longest trip from Lindenwold Station to Philadelphia costs \$1.60; whereas, a comparable trip on a NJ TRANSIT bus costs \$2.95. The last increase in fares was twelve years ago. Annual operating costs are \$27.5 million and operating deficits are paid for by bridge toll revenues, thereby requiring no state or federal subsidies. The current operating ratio is 64 percent.

Observations and Recommendations

1. Suburban versus Downtown Focus: At the same time that SEPTA recognizes the need to move forward with new services to meet suburban demands, it also faces the capital expense burdens presented by a deteriorating infrastructure located primarily in the urban core. Due to the high cost of rehabilitating its infrastructure and its lack of a dedicated local funding source, SEPTA could have limited financial resources over the short and long term to commit to suburban solutions.
2. Integration of Transit Planning: The MPO's regional concept for land use and transportation development that it prepared for the 2020 Plan could provide a common base for the planning that is being conducted by each of the transit providers and could further

integrate the transit providers into the long-range planning process. Also, as the region begins to undertake major investment studies, the federal team fully expects that the collaborative process that is in place and that includes all modal actors, will continue.

VII. Travel Demand Forecasting

DVRPC has a long history of model development. Since the 1960's, its planners have been making incremental improvements to its modeling procedures. The MPO uses the traditional four-step urban transportation modeling methodology to estimate demand on the regional highway network. Currently the modeling framework is being moved to TRANPLAN and TRANSCAD. Each of these runs on microcomputers, in contrast to UTPS, and both have graphical outputs. Having two modeling packages provides much more flexibility in responding to a variety of planning requirements. TRANSCAD can be used for subarea analysis and has the capability of extracting census data and linking other data through its geographic information system (GIS) software. TRANPLAN is more applicable to regional analysis.

DVRPC collects and projects the following information at the traffic zonal level:

- Population.
- Employment by SIC group.
- Employed residents.
- Number of households stratified by numbers of cars available (0 to 3+).
- Total automobiles.

To support the most recent modeling effort, DVRPC prepared regional and county population forecasts using a cohort-component method for the years 2000, 2010, and 2020. Following this, DVRPC prepared municipal level forecasts using a Density Ceiling Extension Model. To develop regionwide and county level employment forecasts, DVRPC began with U.S. Bureau of Economic Analysis estimates. These estimates were then used to develop sectoral distributions by SIC code, and the Census Transportation Planning Package (journey-to-work file) was used to estimate municipal employment numbers.

To ensure that the models meet the requirements of the ISTEA regulations and the CAAA, the MPO hired a consultant to review them and recommend improvements. Since the site visit, the MPO established a work program to address the recommendations and hired consultants to implement them.

The consultant's report included high and low priority model improvements. All of the consultant's recommendations have been addressed in DVRPC's UPWP.

Observations and Recommendations

1. Model Improvements: The MPO has initiated work on all of the recommendations included in the consultant's report.

2. Modeling Transit Access: The incorporation of more sophisticated ways of modeling transit mode of access is being pursued in concert with development of a nested mode choice model.
3. Nested Mode Choice Model Estimation: The nested mode choice work that is planned is divided into two parts, with an auto nest and a transit nest. The work for both modes is being done concurrently and given a high priority.
4. Validation: A detailed validation plan, consistent with FTA and FHWA guidance, is being undertaken. This guidance is contained in FTA's publication, "Procedures and Technical Methods for Transit Project Planning," and in FHWA's courses on travel demand forecasting. This guidance emphasizes validation at a level of detail appropriate to determine whether each model can adequately replicate demand (e.g., trip generation, distribution, mode split, or assignment).
5. Surveys: DVRPC has collected a home-interview survey in 1987-88 and a cordon line origin-destination survey in 1988-89. These surveys are being used in conjunction with the 1990 Census CTPP data to develop, calibrate, and validate the transportation model enhancements.
6. GIS: The MPO is encouraged to continue developing its GIS-T capability so that it can better gauge the impact of land use and transportation changes. This capability could be particularly useful when developing MIS or providing local support to counties and townships.

VIII. Meeting with Local Officials

During the on-site review, the federal team met with representatives of the DVRPC Board of Commissioners to gain their perspective on the transportation planning process. They made the following observations:

1. Consensus Building: The MPO's role as a forum and consensus builder was praised, especially since it works in a challenging planning environment, made complex by geography, jurisdictional boundaries, and the existence of many different transportation and transit agencies.
2. The MPO is Stronger: ISTEA has strengthened the MPO, which is now able to play a pivotal role in the advancement of projects that are included in the TIP.
3. Projects "Bubble Up": The "real" planning begins with the local jurisdictions. It is at this level that project ideas or actual projects are identified. Through the efforts of local governments, planners, and policy-makers, these projects "bubble up." According to the representative of one Commissioner, "the Federal model doesn't fit local reality, because the MPO is still too weak to do regional planning."
4. Educating Elected Officials: Not all elected officials and planning commission members at the county and municipal level understand the MPO's role. These entities typically have no direct link with the MPO and must rely on their respective counties to represent their interests at the regional level. A greater effort should be made at educating local people and integrating their ideas into the regional planning process.

Conclusion

As reflected in the observations throughout this report, the federal team identified several areas where the MPO and the participating agencies in the local transportation planning process appear to have successfully implemented comprehensive and coordinated planning practices. In particular, these include the following areas:

- Cooperation between the states and among the local agencies with the MPO.
- Public involvement process.
- Project prioritization process.
- Linkages between transportation planning and goods movement.
- Commitment to making travel demand modeling enhancements.
- Consideration of the link between transportation and land use planning.
- Technical assistance provided to Pennsylvania and New Jersey member jurisdictions, and when requested, to local jurisdictions.

Conversely, the federal team identified specific areas of activity where continued progress should improve the transportation planning process in the Philadelphia metropolitan area. These include the following areas:

- Better integration of transit plans into the intermodal transportation plan for the region.
- Further development of a more specific long-range plan, with the identification of investments (or placeholders), particularly for improving conformity and financial analyses.
- Refinement of the financial component of the 2020 Plan, assuming it is comparable to what was completed for the 2015 Plan.
- Development of scenarios and a long-range vision for the 2020 Plan.
- Further progress in the development of the Congestion Management System.
- Development of a pedestrian plan.
- Adoption of agreements as required under the Planning Regulations.

- Fostering a better understanding of the regional transportation planning process by Minor Civil Divisions (MCDs) and the relation of their land use decisions to transportation needs.

Appendix A

DVRPC's Board of Commissioners: Membership and Voting

Voting Members:

New Jersey

NJ Department of Community Affairs
NJ Department of Transportation
NJ Governor's Appointee
Burlington County
Camden County
Gloucester County
Mercer County
City of Camden
City of Trenton

Pennsylvania

PA Governor's Policy Office
PA Department of Transportation
PA Governor's Appointee
Bucks County
Chester County
Delaware County
Montgomery County
City of Philadelphia
City of Chester

Non-Voting Members:

PATCO
SEPTA
NJ Transit
Delaware River Port Authority (DRPA)
Federal Transit Administration, Region III
Federal Highway Administration, New Jersey
Federal Highway Administration, Pennsylvania
Regional Citizens Committee
New Jersey Department of Environmental Protection
Pennsylvania Department of Environmental Resources
NJ State Planning
Environmental Protection Agency, Region II
Environmental Protection Agency, Region III
Housing and Urban Development

Appendix B

Local Participants in the EPR of the Philadelphia Metropolitan Area

Delaware Valley Regional Planning Commission

John Coscia, Executive Director
John Claffey, Director, Transportation Planning Division
Ted Dahlburg, Manager, Goods Movement Program
Charles Dougherty, Manager, Plans and Programs
Roger Moog, Manager of Aviation Planning
Sarah Oaks, Senior Transportation Planner
Ron Roggenburk, Manager, Office of Air Quality Planning
Barry Seymour, Director, Regional Planning Division
Donald Shanis, Associate Director, Transportation Planning Division
Candace Snyder, Manager, Office of Communications and Public Affairs
Tom Walker, Senior Planning Analyst, Transportation Planning Division
Thabet Zakaria, Deputy Director, Transportation Planning Division
Jeanne Zarrillo, Executive Assistant

Southeastern Pennsylvania Transportation Authority

Louis J. Gambaccini, General Manager
Richard G. Bickel, Director, Long-range Planning
Richard Burnfield, Manager, Capital Planning
Hal Davidow, Acting Assistant General Manager, Planning & Development Department
George J. Hague, Assistant General Manager, Para Transit Division
Jon Roth, Customer Service Manager, Para Transit Division
Chuck Taft, Transportation Planning Coordinator, Capital Planning
Charles Webb, Manager of City Route and Service Planning, Planning & Development

Pennsylvania Department of Transportation

Mike Baker, Transportation Planning Specialist Supervisor, Center for Program Development & Management
Joe Daversa, Director of the Bureau of Public Transportation
Gerald Fritz, Director, Center for Program Development & Management
Robert Hannigan, Coordinator for MPO, Center for Program Development & Management

New Jersey Department of Transportation

Jerry Mooney, Project Engineer, Planning
Bernie O'Keefe, Principal Transportation Analyst, Transportation
Mark Stout, Manager, Bureau of Capital Programming

New Jersey Transit

Alan Maiman, Manager of Bus Service Planning
Jim Redeker, Director of Business Planning

Delaware River Port Authority

Robert Box, Director of Engineering
Marcy Feldman Rost, Director of the Office of Strategic and Business Planning
Linda Hayes, Capital Grants Development Specialist
Neil Weissman, Planning Liaison

Port Authority Transit Corporation

Robert G. Schwab, General Manager

Pennsylvania Department of Environmental Resources

Arlene Shulman, Acting Chief

New Jersey Department of Environmental Protection

Chris Salmi

Delaware Valley Regional Planning Commission - Board Members/Representatives

Bucks County: Andrew Warren, Chairman, DVRPC Board

State of New Jersey: Raymond Akers, Representative of Governor Whitman,
President, Akres Laboratories, Inc.

City of Philadelphia: Denise Goren, Deputy Mayor for Transportation

City of Camden: Frederick Martin, Director of Utilities

City of Trenton: Allen Mallach, Director of Housing and Development

Burlington County, New Jersey: Ridgeley Ware

Commonwealth of Pennsylvania - Pennsylvania Department of Transportation:
Larry King, Deputy Secretary for Planning

State of New Jersey - New Jersey Department of Transportation:
William Beetle, Director, Transportation System Planning

Regional Citizens Committee

Kevin Doherty, Chairman
Dennis Winters, Vice-Chairman

Appendix C

Agenda for the Enhanced Planning Review Meeting

Philadelphia Metropolitan Area
Enhanced Transportation Planning Review
January 17-19, 1995

Delaware Valley Regional Planning Commission
The Bourse Building
111 South Independence Mall East
Philadelphia, PA 19106-2515

Format for all sessions - Regional agencies present a brief overview followed by a discussion with the Federal Team. All state, regional, and local agencies are requested to participate in all sessions.

Tuesday, January 17

8:15 - 9:00 Federal Team Meeting

Introductions

9:00 - 9:30	Steve Rapley FHWA, Region III	Objectives for enhanced planning review
	John Garrity FTA, Region III	
	Federal Team (see list of participants)	
	Local Participants (see list of participants)	
	Bob Brodesky USDOT/Volpe Center	Overview of agenda

Local Transportation Issues and Organization of the Process

9:30 - 11:30	Steve Rapley, FHWA John Garrity, FTA	Discussion Leaders
	<u>Status/Update/Discussion:</u>	
	John Coscia DVRPC	
	Hal Davidow SEPTA	

Bob Hannigan
PennDOT

NJDOT

NJ Transit

PATCO

Products of the Process - Long-range Plan, TIP, and UPWP (Discussion on financial planning will be held Thursday morning)

11:30 - 12:30	Bob Hall FHWA	Discussion Leader
	Jack Claffey DVRPC	Status/Update/Discussion
	Gerald Fritz PennDOT	
	NJDOT	
	Don Shanis/Barry Seymour DVRPC	Status/Update/Discussion on 2015 and 2020 plans
12:30 - 1:30	Lunch	

Ongoing Transit Planning (meeting at SEPTA)

1:30 - 4:45	John Garrity, FTA	Discussion Leader
	Lou Gambaccini SEPTA	Introductory remarks
	Bob Schwab PATCO	
	Rich Bickel SEPTA	
	Jim Redeker NJ Transit	
	Status/Update/Discussion on following topics by all transit agency staff:	

Examples of the integration of transit planning activities into regional planning efforts:

- Organizational Issues and Strategic Planning Service Performance and Development
- Transit Capital and Operating Plans and Programs
- Major Investment Studies
- Americans with Disabilities Act
- Public Involvement

Wednesday, January 18

Meeting with Several DVRPC Board Members

8:30 - 9:30	Bob Hall PennDOT	Discussion Leader
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Travel Demand Forecasting

9:30 - 10:30	Ron Jensen-Fisher, FTA	Discussion Leader
	Thabet Zakaria DVRPC	Status/Update/Discussion (Integration into the regional planning process)
	Federal Team	

Conformity and Air Quality Planning

10:30 - 12:30	Mario Jorquera, FHWA	Discussion Leader
	Ron Roggenburk DVRPC	Status/Update/Discussion
	Arlene Shulman PADEP	
	Chris Salmi NJDEP	
	Larry Budney EPA, Region III	

Penn DOT

NJDOT

Federal Team

12:30 - 1:30

Lunch

Public Involvement

1:30 - 4:00

Sandra Balmir, FHWA

Discussion Leader

Presentation and Discussion by Candace Snyder and the Citizens' Advisory Committee, DVRPC

Federal Team

Development of Congestion Management and Other Management Systems

4:00 - 4:45

Steve Rapley, FHWA

Discussion Leader

Don Shanis
DVRPC

Status/Update/Discussion

PennDOT

NJDOT

Federal Team

Thursday, January 19

Financial Planning

8:30 - 10:30

Fred Orloski, FHWA

Discussion Leader

Jack Claffey
DVRPC

Status/Update/Discussion
Focusing on the long-range
plan and TIP, and MIS

Charles Dougherty
DVRPC

Discussion of financial
constraints

Discussion of financial constraints along with the integration of agencies' plans and programs with the long-range plan and TIP

Rich Bickel
SEPTA

Jim Redeker
SEPTA

NJ Transit

PATCO

PennDOT

NJ DOT

General Status/Update/Discussion of Other Planning Factors (This is an opportunity to discuss topics or issues that have not yet been covered.)

10:30 - 11:30	Lloyd Jacobs, FHWA	Discussion Leader
	Roger Moog/Ted Dahlburg DVRPC	Discussion of goods movement & airports
	Don Shanis DVRPC	
	Rich Bickel SEPTA	
	PennDOT	
	NJ DOT	
11:30 - 12:30	Lunch	

Federal Staff Meeting to Develop Summary and Follow-up Actions

12:30 - 2:30	Steve Rapley, FHWA John Garrity, FTA
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Wrap-up Meeting - Federal Staff will Present General Observations to Meeting Participants

2:30 - 4:30	Steve Rapley, FHWA John Garrity, FTA
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Appendix D

List of Documents Received and Reviewed

Delaware Valley Regional Planning Commission

1. "Year 2015 Transportation Plan for the Delaware Valley Region," September, 1993.
2. "Draft DVRPC Year 2020 Land Use and Transportation Plan, Centers and Corridors," October, 1994.
3. "Transportation Issues and Goals for the Long-range Plan, A Document for Public Discussion," August, 1993.
4. "Transportation Centers: Concept and Evaluation," October, 1993.
5. "Transportation Improvement Program, FY1995-1998," Adopted July, 1994.
6. "Transportation Improvement Program, Project Ranking & Selection Process," March, 1993.
7. "Fiscal Year 1995 Planning Work Program," January, 1994.
8. "Conformity of the Delaware Valley's FY1995 Transportation Improvement Program and 2015 Plan," July, 1994.
9. "National Association of Regional Councils, Building New Partnerships: The Freight Railroad Industry and Metropolitan Planning Organizations," October 12, 1994.
10. "Review of DVRPC's Regional Travel Simulation Models," June, 1994.
11. "A Public Transportation Solution," October, 1993.
12. "Annual Report, Fiscal Year 1994."
13. "DVRPC Year 2020 Land Use and Transportation Plan: The Policy Agenda."
14. "Vision Statement for the Delaware Valley's Freight Network," January, 1995.
15. "Linking Land Use and Transportation Planning: Case Studies of Successful Implementation," October, 1994.

17. "Year 2020 Municipal Forecasts of Occupied Housing Units, Vehicle Availability, and Employed Residents," June, 1994.
18. "Journey to Work Trends in Eight Suburban Townships, 1970-1990," March, 1994.
19. "Journey to Work Trends in Camden, Trenton, Chester, and Philadelphia, 1970-1990," March, 1994.
20. "A Menu of Implementation Options: A Document of Public Discussion," April, 1994.
21. URS Consultants, "Review of DVRPC's Regional Travel Simulation Models," June, 1994.
22. "Rating the Region, The State of the Delaware Valley," May, 1993.
23. "Policies for the 21st Century, A Document for Public Discussion," May, 1993.
24. "The Public Participation and Policy Statement," April, 1994.

Southeastern Pennsylvania Transportation Authority

1. "Frankford Elevated Reconstruction Project," January, 1995.
2. Urban Institute and Cambridge Systematics, "The Economic Impacts of SEPTA on the Regional and State Economy," May, 1991.
3. "Fiscal Year 1995 Capital Budget," June, 1994.
4. "A Vision of the Future, Planning for the Year 2010," May, 1991.

New Jersey Transit

1. New Jersey Transit, "Burlington/Gloucester Assessment," April, 1993.

Pennsylvania Department of Transportation

1. "Major Metropolitan Transportation Investments/Major Investment Studies Guidance," July, 1994.



